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EXAMINER

BURGE, LONDRA C

ART UNIT	PAPER NUMBER
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2178

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/823,231

Applicant(s)

NELSON, BRUCE ARTHUR

Examiner

Londra C Burge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment filed 10/18/2004.
2. Claims 1-6 and 8-53 are pending. Claims 1, 8, 14, 21, 33, 40, and 46 are independent claims, and claim 7 has been cancelled.
3. This action has been made Final.

Claim Rejections - 35 USC § 102

4. **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. **Claims 14, 17-18, 40, 44-45 remain rejected under 35 U.S.C. 102(a) as being anticipated by Malloy et al. (herein after Malloy) U.S. Patent No. 6,122,636 filed 5/13/1999.**

In regard to independent claim 14, Malloy discloses *a database storing multidimensional data* (Malloy Abstract Lines 1-5 i.e. database management system); *a server to access the multidimensional data* (Malloy Col 11 Lines 45-60 i.e. server computer); *and a client device coupled to the server to display a portion of the data to a user* (Malloy Col 4 Lines 62-67 i.e. client/server architecture in Figure 1 that can store data), *wherein the client device includes a virtual table to store data received from the server* (Malloy Figure 4 shows a starting row and starting column in a table); *and further wherein the server includes state data defining a current viewing location within the virtual table.* (Malloy Col 2 Lines 56-60 i.e. the data in

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the set of multi-dimensional data blocks is stored in a relational database that represents the multi-dimensional database and location of table.)

In regard to dependent claim 17, Malloy discloses *wherein storing state data defining the current viewing location within the data table comprises storing a starting row and a starting column within the data table.* (Malloy Figure 4 shows a starting row and starting column in a table)

In regard to dependent claim 18, Malloy discloses *wherein storing state data comprises storing one of a font size, a column width, a row width, a column height, a row height, one or more column labels and one or more row labels.* (Malloy Figure 4 shows columns that have labels)

In regard to independent claim 40, Malloy discloses *communicating multidimensional data to a client device; storing the data on the client-device and translating the report object into a client-side script;* (Malloy Col 4 Lines 62-67 i.e. client/server architecture in Figure 1 that can communicate data and Col 10 Lines 55-63 i.e. converting data such as MemberIds).

Malloy discloses *generating client-side script based on the report object; communicating the client-side script to the client device; and executing the client-side script to create a representation of the report object on the client device.* (Malloy Col 5 Lines 43-54 i.e. client program executed by the client on a to access data and reports on a remote or local data storage device)

In regard to dependent claim 44, Malloy discloses *wherein the client-side representation defines a table having a number of rows and columns for displaying the included*

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dimensions and members (Malloy Figure 4 shows a rows and columns in a table)(Malloy Col 2 Lines 50-55 i.e. dimensions of the data).

In regard to dependent claim 45, Malloy discloses *storing one or more dimension objects that define a number of dimensions within multidimensional data for the report* (Malloy Col 2 Lines 50-55 i.e. dimensions of the data and Col 3 Lines 14-17); *storing one or more query set object that define a database query string for each dimension* (Malloy Col 2 Lines 56-60 i.e. the data in the set of multi-dimensional data blocks is stored in a relational database that represents the multi-dimensional database and Col 5 Lines 50-54 queries stored on a storage device to retrieve data and Col 3 Lines 14-17); *and storing one or more member objects that define the included members for each dimension.* (Malloy Col 2 Lines 50-55 i.e. dimensions of the data and Malloy Col 6 Lines 60-67 i.e. parent member and children which can be defined and Col 3 Lines 14-17).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6, 8-13, 15, 19-20, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malloy et al. (herein after Malloy) U.S. Patent No. 6,122,636 filed 5/13/1999 in view of King et al. (herein after King) U.S. Patent No. 6,161,114 filed 4/14/1999.

In regard to independent claim 1, Malloy discloses *storing state data on a server, wherein the state data defines a current viewing location within a data table storing multidimensional data on a client device; the client device for displaying to a user a portion of the data table stored on the client device* (Malloy Col 2 Lines 56-60 i.e. the data in the set of multi-dimensional data blocks is stored in a relational database that represents the multi-dimensional database and Col 4 Lines 61-65 i.e. indicates that the invention take place in a client/server environment)

Malloy does not specifically mention *formatting a web page at the server based on the current viewing location within the data table as defined by the state data; and communicating the web page* However, King mentions a composition rendered to HTML media may be formatted for presentation in a Web page format and translated into the HTML language, although these same Web pages, which can also include the tables taught by Malloy, may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the multidimensional data taking existing content that the user has specified within a particular design to fit into a requires region as taught by King Col 34 Lines 63-67.

In regard to dependent claim 2, Malloy discloses *wherein storing state data defining the current viewing location within the data table comprises storing at the server a starting row and a starting column within the data table stored on the client device.* (Malloy Figure 4 shows a starting row and starting column in a table and Col 4 Lines 61-65 i.e. indicates that the invention take place in a client/server environment)

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In regard to dependent claim 3, Malloy discloses *wherein storing state data comprises storing one of a font size, a column width, a row width, a column height, a row height, one or more column labels and one or more row labels*. (Malloy Figure 4 shows columns that have labels)

Malloy does not specifically mention *for use in formatting the web page*. However, King mentions a composition rendered to HTML media may be formatted for presentation in a Web page format and translated into the HTML language, although these same Web pages may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the multidimensional data taking existing content that the user has specified within a particular design to fit into a requires region as taught by King Col 34 Lines 63-67.

In regard to dependent claim 4, Malloy discloses *stored on the client device* (Malloy Col 4 Lines 61-65 i.e. indicates that the invention take place in a client/server environment).

Malloy does not specifically mention *calculating widths and heights for rows and columns of the web page based on data of the data table; and generating code to format the web page according to the calculated widths and heights*. However, King mentions columns and widths that are calculated (King Col 26 Lines 37-46) (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of calculating the height and width of the rows and columns to ensure the web page will be formatted correctly.

In regard to dependent claim 5, Malloy does not specifically mention *wherein the code comprises HTML*. However, King mentions publish this same document in an HTML format (King Col 49 Lines 29-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of having the web page in HTML format, which is the common language web pages are written in.

In regard to dependent claim 6, Malloy does not specifically mention *receiving at the client device input from the user to scroll the viewable window within the page; and displaying a different portion of the data table stored on the client device without requiring the server to regenerate the web page*. However, King shows a website that has scrollbar which can be used based on the amount of data on the page (King Fig 1A). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of having a scrollbar so the user can scroll down and view the entire document which may be too large to fit on the screen.

In regard to independent claim 8, claim 8 in addition to the following reflects similar subject matter claimed in claim 1 and is rejected along the same rationale.

A Computer-readable medium (Malloy Col 13 Lines 34-37)

In regard to dependent claim 9, claim 9 in addition to the following reflects similar subject matter claimed in claim 2 and is rejected along the same rationale.

A Computer-readable medium (Malloy Col 13 Lines 34-37)

In regard to dependent claim 10, claim 10 in addition to the following reflects similar subject matter claimed in claim 3 and is rejected along the same rationale.

A Computer-readable medium (Malloy Col 13 Lines 34-37)

In regard to dependent claim 11, claim 11 in addition to the following reflects similar subject matter claimed in claim 4 and is rejected along the same rationale.

A Computer-readable medium (Malloy Col 13 Lines 34-37)

In regard to dependent claim 12, Malloy does not specifically mention *including instructions to cause the processor to embed scroll bars in the web page based on an amount of data within the data table to display a viewable window into the data table stored on the client device*. However, King shows a website that has scrollbar which can be used based on the amount of data on the page (King Fig 1A). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of having a scrollbar so the user can scroll down and view the entire document which may be too large to fit on the screen.

In regard to dependent claim 13, Malloy discloses further *including instructions to cause the processor to communicate the data table to the client device*. (Malloy Col 5 Lines 32-35 i.e. instructions executed by the computers)

In regard to dependent claim 15, Malloy discloses *wherein the server includes a page generation module*. (Malloy Col 4 Lines 62-67 i.e. client/server architecture in Figure 1 that can store data)

Malloy does not specifically mention *formatting a web page based on the state data*. However, King mentions a composition rendered to HTML media may be formatted for presentation in a Web page format and translated into the HTML language, although these same Web pages may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of

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the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the multidimensional data taking existing content that the user has specified within a particular design to fit into a requires region as taught by King Col 34 Lines 63-67.

In regard to dependent claim 19, Malloy does not specifically mention *wherein the page generation module calculates widths and heights for rows and columns displayed to the user based on data of the data table*. However, King mentions columns and widths that are calculated (King Col 26 Lines 37-46) (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of calculating the height and width of the rows and columns to ensure the web page will be formatted correctly.

In regard to dependent claim 20, Malloy does not specifically mention *wherein the page generation module embeds scroll bars in the web page based on an amount of data within the data table*. However, King shows a website that has scrollbar which can be used based on the amount of data on the page (King Fig 1A). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of having a scrollbar so the user can scroll down and view the entire document which may be too large to fit on the screen.

In regard to independent claim 43, Malloy does not disclose *further comprising presenting a web-based report to a user based on the client-side representation*. However, King shows a report that is presented to the user (King Figures 1A-D) and that these pages can be shown on web pages on a computer screen (King Col 10 Lines 44-50). It would have been

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obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of presenting these reports on web pages which can be easily accessed over the internet at anytime and accessed by numerous users.

8. **Claims 16, 46-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malloy et al. (herein after Malloy) in view of King et al. (herein after King) as applied to claims 14 and in further view of Ramaswamy et al (herein after Ramaswamy U.S. Patent No 6,510,164 B1 filed 11/16/1998.100**

In regard to dependent claim 16, Malloy does not disclose *wherein the server includes a packet engine to communicate the data to the client-device in a stream of packets*. However, Ramaswamy mentions a packet engine module to communicate data packets (Ramaswamy Col 8 Lines 48-55). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ramaswamy to Malloy, providing Malloy the benefit of having a packet engine to communicate data and deliver the packets to the transmit queue to be sent to the external network and to handle communication between software modules as taught by Ramaswamy Col 8 Lines 48-65.

In regard to independent claim 46, Malloy *a client, device; discloses a database storing multidimensional data; a server comprising: a report object defining dimensions and members of multidimensional data that are included in an electronic report* (Malloy Col 2 Lines 50-55 i.e. dimensions of the data and Malloy Col 6 Lines 60-67 i.e. parent member and children which can be stored Malloy Col 4 Lines 61-65 i.e. indicates that the invention take place in a client/server environment); *a model converter to translate the report object into a*

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client-side script for creating a client-side representation of the report object(Malloy Col 4 Lines 62-67 i.e. client/server architecture in Figure 1 that can communicate data and Col 10 Lines 55-63 i.e. converting data such as MemberIds).

Malloy does not specifically mention *a page generation module to access the multidimensional data and format a web page based on the report object*. However, King mentions a composition rendered to HTML media may be formatted for presentation in a Web page format and translated into the HTML language, although these same Web pages may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the multidimensional data taking existing content that the user has specified within a particular design to fit into a requires region as taught by King Col 34 Lines 63-67.

Malloy does not disclose *a packet engine to communicate the web page and the client-side script to a client device in a stream of packets*. However, Ramaswamy mentions a packet engine module to communicate data packets (Ramaswamy Col 8 Lines 48-55). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ramaswamy to Malloy, providing Malloy the benefit of having a packet engine to communicate data and deliver the packets to the transmit queue to be sent to the external network and to handle communication between software modules as taught by Ramaswamy Col 8 Lines 48-65.

In regard to independent claim 47, Malloy discloses *wherein the client device displays the web page to a user, wherein the client device includes a virtual table to store data*. (Malloy

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Col 11 Lines 45-60 i.e. server computer)(Malloy Col 4 Lines 62-67 i.e. client/server architecture in Figure 1 that can store data)(Malloy Figure 4 shows a *table*)

Malloy does not disclose data received from the *packet engine*. However, Ramaswamy mentions a packet engine module to communicate data packets (Ramaswamy Col 8 Lines 48-55). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ramaswamy to Malloy, providing Malloy the benefit of having a packet engine to communicate data and deliver the packets to the transmit queue to be sent to the external network and to handle communication between software modules as taught by Ramaswamy Col 8 Lines 48-65.

In regard to independent claim 48, Malloy discloses *wherein the server includes state data defining a current viewing location within the virtual table*. (Malloy Col 2 Lines 56-60 i.e. the data in the set of multi-dimensional data blocks is stored in a relational database that represents the multi-dimensional database and location of table.)

In regard to dependent claim 49, claim 49 in addition to the following reflects similar subject matter claimed in claim 2 and is rejected along the same rationale.

A system (Malloy Col 13 Lines 34-37)

In regard to dependent claim 50, claim 50 in addition to the following reflects similar subject matter claimed in claim 3 and is rejected along the same rationale.

A system (Malloy Col 13 Lines 34-37)

In regard to dependent claim 51, Malloy does not specifically mention *wherein the page generation module calculates widths and heights for rows and columns of the web page based on characteristics of the accessed data..* However, King mentions columns and widths

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that are calculated (King Col 26 Lines 37-46) (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of calculating the height and width of the rows and columns to ensure the web page will be formatted correctly.

In regard to dependent claim 52, claim 52 in addition to the following reflects similar subject matter claimed in claim 6 and is rejected along the same rationale.

A system (Malloy Col 13 Lines 34-37)

9. **Claims 21, 25-33, 37, are rejected under 35 U.S.C. 103(a) as being unpatentable over Malloy et al. (herein after Malloy) U.S. Patent No. 6,122,636 filed 5/13/1999 in view of King et al. (herein after King) U.S. Patent No. 6,161,114 filed 4/14/1999 and in further view of Earle U.S. Patent No 5,359,724 filed 3/30/1992.**

In regard to independent claim 21, Malloy discloses *communicating multidimensional data from a server to a client device; storing the data on the client device* (Malloy Col 4 Lines 62-67 i.e. client/server architecture in Figure 1 that can communicate data and Col 4 Lines 61-65 i.e. indicates that the invention take place in a client/server environment).

Malloy does not specifically mention *formatting at the server a web page to include data located within the viewable window into the data stored on the client device; and displaying the web page to a user via the client device*. However, King mentions a composition rendered to HTML media may be formatted for presentation in a Web page format and translated into the HTML language, although these same Web pages may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of

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ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the multidimensional data taking existing content that the user has specified within a particular design to fit into a requires region as taught by King Col 34 Lines 63-67.

Malloy does not specifically mention *storing pointers at the client device defining a viewable window within the data stored at the client device*. However, Earle mentions a means for retrieving multi dimensional data via a pointer (Earle Col 22 Lines 1-11). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Earle to Malloy, providing Malloy the benefit of using a pointer to retrieve data and retrieving the data from an indicated cell as taught by Earle Col 22 Lines 1-11.

In regard to dependent claim 25, Malloy discloses that a *client device* is used (Malloy Col 4 Lines 61-65 i.e. indicates that the invention take place in a client/server environment).

Malloy does not specifically mention *formatting refreshing the display of the client device to include data encompassed by the viewable window*. However, King mentions Web pages may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the multidimensional data taking existing content that the user has specified within a particular design to fit into a requires region to be viewed by the user as taught by King Col 34 Lines 63-67.

Malloy does not specifically mention *receiving a user request to scroll the viewable window through the data and updating the pointers defining the viewable window based on the*

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scroll request. However, King shows a website that has scrollbar which can be used based on the amount of data on the page (King Fig 1A) and having a pointer (King Col 17 Lines 32-35). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of having a scrollbar so the user can scroll down and view the entire document which may be too large to fit on the screen and using a pointer to retrieve data and retrieving the data from an indicated cell as.

In regard to dependent claim 26, Malloy discloses *reordering rows of a document object model based on input received from user; and filling the document object model with data encompassed by the viewable window*. (Malloy Figure 4 shows a starting row and starting column in a table)(Malloy Col 14 Lines 5-11 i.e. ordering of the multi dimensional data blocks and Col 5 Lines 1-5 i.e. display).

In regard to dependent claim 27, Malloy discloses *retrieving data for children of the expanded member as a function of the viewing window; and refreshing the display of the client device based on the expanded viewable window*. (Malloy Col 6 Lines 60-67 i.e. parent member and children which can be refreshed)

Malloy does not specifically mention *receiving a user request to expand a member of the multidimensional data*. However, King shows a website that has scrollbar which can be used based on the amount of data on the page which can be expanded (King Fig 1A) and having a pointer (King Col 17 Lines 32-35). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of having a scrollbar and retrieving the data from an indicated cell as to ensure the user gets to correctly document the wish to view.

Malloy does not specifically mention *updating the pointers* defining the viewable window to include the children of the expanded member. However, Earle mentions a means for retrieving multi dimensional data via a pointer (Earle Col 22 Lines 1-11). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Earle to Malloy, providing Malloy the benefit of using a pointer to retrieve data and retrieving the data from an indicated cell as taught by Earle Col 22 Lines 1-11.

In regard to dependent claim 28, Malloy discloses *constructing a database query ... and querying a database to retrieve rows proximate to the viewable window*. (Malloy Col 2 Lines 56-60 i.e. the data in the set of multi-dimensional data blocks is stored in a relational database that represents the multi-dimensional database and Col 5 Lines 50-54 queries stored on a storage device to retrieve data)

Malloy does not specifically mention *updating the pointers defining the viewable window to include the children of the expanded member*. However, Earle mentions a means for retrieving multi dimensional data via a pointer (Earle Col 22 Lines 1-11). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Earle to Malloy, providing Malloy the benefit of using a pointer to retrieve data and retrieving the data from an indicated cell as taught by Earle Col 22 Lines 1-11.

In regard to dependent claim 29, Malloy discloses *storing a report object defining at least the dimensions and members of the multidimensional data; and updating a report object to include children of the member to be expanded*. (Malloy Col 2 Lines 50-55 i.e. dimensions of the data and Malloy Col 6 Lines 60-67 i.e. parent member and children which can be updated)

In regard to dependent claim 30, Malloy discloses *storing the data on the client device as a virtual table; and generating a client-side script to update the virtual table to accommodate the expanded member.* (Malloy Col 2 Lines 56-60 i.e. the data in the set of multi-dimensional data blocks is stored in a relational database that represents the multi-dimensional database and Malloy Figure 4 shows *table*)(Malloy Col 10 Lines 18-21 i.e. client program to access data)

In regard to dependent claim 31, Malloy discloses *generating a client-side script based on the report object; communicating the client-side script to the client device; and executing the client-side script to create a representation of the report object on the client device.* (Malloy Col 5 Lines 43-54 i.e. client program executed by the client on a to access data and reports on a remote or local data storage device)

In regard to dependent claim 32, Malloy discloses *further comprising generating client-side script to update the representation to accommodate additional data resulting from the expand request.* (Malloy Col 5 Lines 43-54 i.e. client program executed by the client on a to access data and reports on a remote or local data storage device) (Malloy Col 6 Lines 60-67 i.e. parent member and children which can be expanded).

In regard to independent claim 33, Malloy discloses *receive multidimensional data* (Malloy Col 2 Lines 48-6); *store the data in a virtual table on a client device* (Malloy Figure 4 shows a table for storing the data and Col 4 Lines 61-65 i.e. indicates that the invention take place in a client/server environment);

Malloy does not specifically mention *format a web page at the client device to specify within the viewable window into the data stored on the client device; and display the web page*

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to a user. However, King mentions a composition rendered to HTML media may be formatted for presentation in a Web page format and translated into the HTML language, although these same Web pages may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the multidimensional data taking existing content that the user has specified within a particular design to fit into a requires region as taught by King Col 34 Lines 63-67.

Malloy does not specifically mention *storing pointers at a client device defining a viewable window within the virtual table for the client device.* However, Earle mentions a means for retrieving multi dimensional data via a pointer (Earle Col 22 Lines 1-11). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Earle to Malloy, providing Malloy the benefit of using a pointer to retrieve data and retrieving the data from an indicated cell as taught by Earle Col 22 Lines 1-11.

In regard to dependent claim 37, Malloy does not specifically mention *receiving a user request to scroll the viewable window through the data.* However, King shows a website that has scrollbar which can be used based on the amount of data on the page (King Fig 1A). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of having a scrollbar so the user can scroll down and view the entire document which may be too large to fit on the screen.

Malloy does not specifically mention *updating the pointers defining the viewable window based on the scroll request.* However, Earle mentions a means for retrieving multi dimensional

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data via a pointer (Earle Col 22 Lines 1-11). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Earle to Malloy, providing Malloy the benefit of using a pointer to retrieve data and retrieving the data from an indicated cell as taught by Earle Col 22 Lines 1-11.

Malloy does not specifically mention *formatting the web page to include data encompassed by the viewable window*. However, King mentions a composition rendered to HTML media may be formatted for presentation in a Web page format and translated into the HTML language, although these same Web pages may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the multidimensional data taking existing content that the user has specified within a particular design to fit into a requires region as taught by King Col 34 Lines 63-67.

10. Claims 22-24, 34-36 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malloy et al. (herein after Malloy) in view of King et al. (herein after King) in view of Earle as applied to claims 21 and 33 and in further view of Ramaswamy et al (herein after Ramaswamy U.S. Patent No 6,510,164 B1 filed 11/16/1998.100.

In regard to dependent claim 22, Malloy mentions *a virtual table on the client device*. (Malloy Figure 4 shows a table and Col 4 Lines 61-65 i.e. indicates that the invention take place in a client/server environment)

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Malloy does not mention *wherein communicating the multidimensional data comprises communicating the data to a client device in a stream of packets*. However, Ramaswamy mentions a packet engine module to communicate a stream of data packets (Ramaswamy Col 8 Lines 48-55). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ramaswamy to Malloy, providing Malloy the benefit of having a packet engine to communicate data and deliver the packets to the transmit queue to be sent to the external network and to handle communication between software modules as taught by Ramaswamy Col 8 Lines 48-65.

Malloy does not *mention and wherein storing the data comprises assembling the packets to form a virtual table on the client device*. However, Ramaswamy mentions reconstruction messages from the data packets (Ramaswamy Col 8 Lines 12-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ramaswamy to Malloy, providing Malloy the benefit of assembling or reconstructing data of the benefit of having various and different data provided in the data packet as taught by Ramaswamy Col 8 Lines 12-22.

In regard to dependent claim 23, Malloy does not specifically mention *formatting the web page based on the data of initial set of data packets*. However, King mentions a composition rendered to HTML media may be formatted for presentation in a Web page format and translated into the HTML language, although these same Web pages may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the

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multidimensional data taking existing content that the user has specified within a particular design to fit into a requires region as taught by King Col 34 Lines 63-67.

Malloy does not mention *transmitting an initial set of data packets to the client device; storing data from the initial set of data packets*. However, Ramaswamy mentions a packet engine module to communicate a stream of data packets (Ramaswamy Col 8 Lines 48-55 and Col 13 Lines 24-27 i.e. stored in a buffer). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ramaswamy to Malloy, providing Malloy the benefit of having a packet engine to communicate data and deliver the packets to the transmit queue to be sent to the external network and to handle communication between software modules and storing the data as taught by Ramaswamy Col 8 Lines 48-65.

In regard to dependent claim 24, Malloy does not specifically *mention receiving a request for any remaining data packets; and communicating the remaining data packets to the client device*. However, Ramaswamy mentions a packet engine module to communicate a stream of data packets (Ramaswamy Col 8 Lines 48-55 and Col 13 Lines 24-27 i.e. stored in a buffer) and the data packet specifically requests a particular application (Ramaswamy Col 10 Lines 6-8). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ramaswamy to Malloy, providing Malloy the benefit of having a packet engine to communicate data and deliver the packets to the transmit queue to be sent to the external network and to handle communication between software modules, storing the data and requesting particular data so to user can have access to the data that they want as taught by Ramaswamy Col 8 Lines 48-65.

In regard to dependent claim 34, Malloy discloses having *instructions thereon to cause a programmable processor to receive the data to a client device in a stream of packets and to*

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form the virtual table. (Malloy Col 5 Lines 32-35 i.e. instructions executed by the computers Malloy Figure 4 shows a table)

Malloy does not specifically *mention and to assemble the packets* to form the virtual table. However, Ramaswamy mentions a packet engine module to communicate a stream of data packets, which can form a table (Ramaswamy Col 8 Lines 48-55 and Col 13 Lines 24-27 i.e. stored in a buffer). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ramaswamy to Malloy, providing Malloy the benefit of having a packet engine to communicate data and deliver the packets to the transmit queue to be sent to the external network and to handle communication between software modules, storing the data and requesting particular data so to user can have access to the data that they want as taught by Ramaswamy Col 8 Lines 48-65.

In regard to dependent claim 35, Malloy does not specifically mention *formatting a web page*. However, King mentions a composition rendered to HTML media may be formatted for presentation in a Web page format and translated into the HTML language, although these same Web pages may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the multidimensional data taking existing content that the user has specified within a particular design to fit into a requires region as taught by King Col 34 Lines 63-67.

Malloy does not specifically *receiving an initial set of data packets; store data from the initial set of data packets*. However, Ramaswamy mentions a packet engine module to

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communicate a stream of data packets, which can form a table and be stored (Ramaswamy Col 8 Lines 48-55 and Col 13 Lines 24-27 i.e. stored in a buffer). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ramaswamy to Malloy, providing Malloy the benefit of having a packet engine to communicate data and deliver the packets to the transmit queue to be sent to the external network and to handle communication between software modules, storing the data and requesting particular data so to user can have access to the data that they want as taught by Ramaswamy Col 8 Lines 48-65.

In regard to dependent claim 36, Malloy does not mention to *issue a request for any remaining data packets; and receive the remaining data packets to fill the virtual table.*

However, Ramaswamy mentions a packet engine module to communicate a stream of data packets, which can be put into a table and be stored (Ramaswamy Col 8 Lines 48-55 data packets and Col 13 Lines 24-27 i.e. stored in a buffer). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ramaswamy to Malloy, providing Malloy the benefit of having a packet engine to communicate data and deliver the packets to the transmit queue to be sent to the external network and to handle communication between software modules, storing the data and requesting particular data so to user can have access to the data that they want as taught by Ramaswamy Col 8 Lines 48-65.

In regard to dependent claim 38, claim 38 in addition to the following reflects similar subject matter claimed in claim 26 and is rejected along the same rationale.

A Computer-readable medium (Malloy Col 13 Lines 34-37)

In regard to dependent claim 39, claim 39 in addition to the following reflects similar subject matter claimed in claim 27 and is rejected along the same rationale.

A Computer-readable medium (Malloy Col 13 Lines 34-37)

12. Claims 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malloy et al. (herein after Malloy) as applied to claim 40 in view of Marmor U.S. Patent No. 6,601,108, B1 filed 10/8/1998.

In regard to dependent claim 41, Malloy does not specifically mention the data representation be supported by a web browser. However, Marmor mentions the displaying of pages supported by a browser (Marmor Col 3 Lines 58-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Marmor to Malloy, providing Malloy the benefit of ensuring the data presentation is viewable through a web browser so the data can be view on any computer having a browser from any location and numerous users having a browser can view the data also.

In regard to dependent claim 42, Malloy does not specifically mention wherein creating the representation in a native format comprises creating the representation according to a document object model supported by Internet Explorer™ from Microsoft™. However, Marmor mentions Internet Explorer being used to view data. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Marmor to Malloy, providing Malloy the benefit of making the data viewable with Internet Explorer as it is known that IE is one of the most commonly used browsers by users and this would ensure that the data can be view by many of these users.

13. **Claims 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malloy et al. (herein after Malloy) in view of King et al. (herein after King) as applied to claims and in further view of Ramaswamy et al (herein after Ramaswamy as applied to claim 46 in further view of Earle U.S. Patent No 5,359,724 filed 3/30/1992.**

In regard to dependent claim 53, Malloy does not specifically mention *wherein the client device maintains pointers defining a viewing window within the virtual table*. However, Earle mentions a means for retrieving multi dimensional data via a pointer (Earle Col 22 Lines 1-11). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Earle to Malloy, providing Malloy the benefit of using a pointer to retrieve data and retrieving the data from an indicated cell as taught by Earle Col 22 Lines 1-11.

Response to Arguments

14. **Applicant's arguments filed 10/18/2004 have been fully considered but they are not persuasive.**

The applicant argues that Malloy does not disclose a virtual table that stores data and that Malloy is referring to a relational database (Page 13 Para 3). However, it is well known in the art that a relational database is a set of tables containing rows and columns, which contain data for viewing by the user.

The applicant also argues that Malloy does not disclose of a client/server environment for the invention (Page 14 Para 1-3). However, Col 4 Lines 61-65 indicates that the invention take place in a client/server environment.

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The applicant also argues that Malloy does not disclose font size, column width, a row width, a column height, a row height, one or more column labels and one or more row labels. However, it is well known in the art in relational databases such as Microsoft Excel, a user can adjust fonts, and column and row heights and widths.

The applicant also argues that neither Malloy nor King suggest formatting a web page. However, King mentions a composition rendered to HTML media may be formatted for presentation in a Web page format and translated into the HTML language, although these same Web pages, which can also include the tables taught by Malloy, may be prepared for viewing on a computer screen via a print preview option (King Col 35 Lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply King to Malloy, providing Malloy the benefit of formatting a web page based on the storing of the multidimensional data taking existing content that the user has specified within a particular design to fit into a required region as taught by King Col 34 Lines 63-67.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Londra C Burge whose telephone number is (571) 272-4122. The examiner can normally be reached on 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LCB
3/16/2005


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